

SUMMARY OF KEY CHANGES

TO THE NEW SOURCE PERFORMANCE STANDARDS

On April 17, 2012, the U.S. Environmental Protection Agency (EPA) issued cost-effective regulations, required by the Clean Air Act, to reduce harmful air pollution from the oil and natural gas industry while allowing continued, responsible growth in U.S. oil and natural gas production. The final rules include the first federal air standards for natural gas wells that are hydraulically fractured, along with requirements for several other sources of pollution in the oil and gas industry for which there are currently no federal standards. The rules for fractured gas wells rely on proven, cost-effective technology and practices used by industry leaders today, including those in EPA's Natural Gas STAR Program.

After considering the extensive comments received on the proposed rule, the final rule increases compliance flexibility for well owners and operators; streamlines notification, reporting, and recordkeeping; avoids unnecessary spending of state and private resources; enhances transparency and accountability; and maintains comparable environmental benefits.

KEY PROVISIONS IN THE FINAL RULE

- Green completions, also called reduced emission completions (or RECs), continue to be identified as the best system of emission reduction, but EPA has identified a transition period (until January 1, 2015) to ensure green completion equipment is broadly available. During this transition period, fractured and refractured wells must reduce their emissions through combustion devices (flares). To recognize the leadership of owners and operators who have already adopted green completions as a best management practice and to encourage others to become early adopters, while at the same time eliminating unnecessary expenditures of state resources, the final rule redefines actions that constitute modifications under the New Source Performance Standard program (NSPS).

COMMENTS SUBMITTED ON THE PROPOSED RULE

- Substantive comments were received on the proposed rule including a significant amount of new data. This information focused on a number of key issues, including:
 - The intended breadth and impact of the rule including clarification of the definitions of natural gas well and reduced emission completions;
 - The technical feasibility and cost effectiveness of reduced emission completions, including the availability of equipment need to perform green completions;
 - The rule's alignment with existing state permitting programs;
 - The advisability of pre-notification and annual reporting requirements; and
 - A variety of technical issues related to proposed controls of pipeline gas, pneumatic controllers, and storage tanks.

CHANGES MADE IN THE FINAL RULE

- ***The definition of natural gas well was clarified.***
 - In response to questions about the intended breadth of the rule, the definition of a natural gas well was expanded to provide more certainty to the regulated community as well as state regulators. Language was added to identify key indicators of natural gas wells, including the availability of appropriate gas collection infrastructure as well as drilling locations within the four geologic formation types generally accepted as gas-producing. The four formation types are high permeability gas, shale gas, other tight reservoir rock, and coal seam.
- ***The definition of green completion was clarified to focus on performance rather than identifying specific required technology for these completions.***
 - The changes allow greater flexibility, lower costs, and reduced burden on equipment manufacturing and distribution, while maintaining the intended emission reductions.
- ***Low-pressure wells were identified and exempted from green completion requirements.***
 - In addition to wildcat and delineation wells, the final rule exempts non-wildcat and non-delineation low-pressure wells from the need to conduct green completions because of technical infeasibility. Information gathered by EPA indicates that green completions are not feasible to conduct in approximately 87 percent of the natural gas wells fractured in coal bed methane formations. The change reduces approximately 10 percent of the fractured natural gas wells overall, which recognizes current technology limitations, lowers expected compliance costs of the rule and reduces anticipated burdens on equipment manufacturing and distribution.
- ***A transition period was identified before green completions would be required.***
 - The final rule allows affected sources until January 1, 2015 before they need to conduct green completions, ensuring sufficient time for needed cost-effective control equipment and trained operators to become broadly availability. During this transition period, flaring will be required to reduce VOC emissions by 95 percent and thus preserves comparable environmental benefits.
- ***Early adoption of green completions will be encouraged.***
 - The definition of modifications was revised to recognize the leadership of well owners and operators who have already adopted green completions as best management practices and to encourage others to become early adopters. Given that green completions minimize emission increases that would otherwise trigger requirements for modifications under NSPS, owners and operators of existing wells can choose to conduct refracturing activities without changing their state permit status. This revision also has the advantage of maintaining flexibility in the application of state permitting authority and resources without compromising emission reductions. Lastly, as an incentive for early installation of green

completion equipment, this change could have the effect of increasing its availability in ways that benefit supply and price.

- ***Pre-notification requirements were streamlined and annual reports were revised to enhance transparency and accountability.***
 - Pre-notification has been simplified to sending an email no later than 2 days prior to completion following the hydraulic fracturing or refracturing of a gas well. State pre-notification requirements were also determined to be sufficient for compliance as a way to avoid unnecessary duplication. Transparency and accountability have been enhanced by requiring a senior official to certify the accuracy of annual reports. In addition, the agency has provided more flexible and streamlined options for industry to structure their annual compliance reports, including allowing them to report emissions by company, not by source as was the case in the proposed rule.

- ***Does not finalize requirements for compressors and pneumatic controllers in the transmission segment of this industry***
 - Based on public comment, the agency concluded it needed additional information in order to set cost-effective standards for compressors and controllers in this segment, where VOC content of the gas generally is low.

- ***A variety of changes were made to encourage leak reductions from existing equipment and from storage vessels in response to technical comments.***
 - A number of technical changes were made as a result of comments received. Most notably, the final rule exempted from regulation low-bleed controllers (with bleed rates below 6 standard cubic feet per hour) located between the well-head and the point where the gas enters the transmission line, to encourage a quicker transition from high-bleed controllers. The requirements for high-bleed controllers were also phased in over one year to give manufacturers of these devices the time needed to test and document the gas bleed rate. A different metric was also identified to simplify the determination of which storage tanks are covered by the standards. Instead of the proposed throughput measurement, the final rule identified a regulatory cutoff of 6 tons of VOC emissions annually for storage tanks. In addition, the final rule provides a one year phase-in for required storage vessel combustion devices to ensure equipment availability.